

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE CLAIMS

Claim 1 has been amended to clarify the structure of the reflection mirror and the mirror moving section. More specifically, claim 1 has been amended to clarify that the reflection mirror is provided at a lower portion of the base to reflect the laser beam output from the optical fiber along a path substantially parallel to a light path of the transmitted illuminative light from the light source, so as to introduce the laser beam into a vicinity of an outermost side of the condenser lens. Claim 1 has also been amended to clarify that the mirror moving section moves the reflection mirror in a translatory manner, with respect to the condensing lens, in a direction that is substantially perpendicular to the light path of the transmitted illuminative light from the light source, such that when the mirror moving section moves the reflection mirror, the path of the laser beam reflected by the reflection mirror remains substantially parallel to the light path of the transmitted illuminative light. Still further, claim 1 has been amended to clarify that when the mirror moving section moves the reflection mirror with respect to the condensing lens, an incidence angle,

at a boundary of the specimen, of the laser beam emitted from the condenser lens is changed, thereby changing a leak-out depth of evanescent light that illuminates the specimen.

Claims 45 and 46, moreover, have been amended along the same lines as claim 1.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

THE PRIOR ART REJECTION

Claims 1, 45 and 46 were rejected under 35 USC 103 as being obvious in view of the combination of Axelrod ("Total Internal Reflection Fluorescence at Biological Surfaces") and USP 6,055,097 ("Lanni et al"). This rejection, however, is respectfully traversed with respect to the claims as amended hereinabove.

The Examiner acknowledges on page 3 of the Office Action that Axelrod does not disclose moving the mirror M thereof. For this reason, the Examiner has cited Lanni et al to supply the missing teachings of Axelrod.

As recognized by the Examiner, Lanni et al discloses that a piezoelectric drive can be provided on dichroic reflector 26 (or on mirrors 71, 72 or 73) to move "a full wavelength per cycle of the standing wave field" for phase adjustment at column 9,

lines 49-52, although Lanni et al does not describe here the direction of movement of the mirrors. Lanni et al also discloses a rotatable mirror 68 (that is not moved in a translatory manner) that can be rotated to change the illumination angle with respect to the specimen at column 9, lines 57-62. It is respectfully pointed out, moreover, that as shown in FIG. 2 of Lanni et al, light used in the system disclosed therein is normal illumination light of total internal reflection. Accordingly, it is respectfully submitted that Lanni et al does not disclose evanescent light or changing a leak-out depth of the evanescent light.

According to the present invention, a reflection mirror is moved in a translatory manner (e.g., horizontally) in a direction that is substantially perpendicular to the light path of the transmitted illuminative light from the light source, such that when the mirror moving section moves the reflection mirror, the path of the laser beam reflected by the reflection mirror remains substantially parallel to the light path of the transmitted illuminative light, and when the mirror moving section moves the reflection mirror with respect to the condensing lens, an incidence angle, at a boundary of the specimen, of the laser beam emitted from the condenser lens is changed, thereby changing a leak-out depth of evanescent light that illuminates the specimen.

With this structure, fine adjustment of the illumination angle from the condenser lens to the specimen is possible, whereby a subtle leak-out depth of evanescent light can be controlled easily.

It is respectfully submitted that even if the modification of Axelrod in view of Lanni et al suggested by the Examiner were reasonable, the structure of the present invention as recited in amended independent claims 1, 45 and 46 still would not be achieved or rendered obvious by such combination.

Accordingly, it is respectfully submitted that the present invention as recited in amended independent claims 1, 45 and 46, as well as each of claims 4-20 and 23-44 depending from amended independent claim 1, clearly patentably distinguishes over Axelrod and Lanni et al under 35 USC 103.

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In view of the foregoing, entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

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If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

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